

GWF Technical Track:

Spatial Computing
& Digital Twin

**MTwin: When Technology is Not The
Constraint**



01 May 2026

Eamonn Prowse – Senior Director UK

About Us

Industry Pioneers

25 years of designing, integrating & delivering leading-edge Geospatial & Engineering solutions

Agile Partner

Adaptable structure to prioritize your needs and meet your deadlines efficiently

Mapping Specialists

Technology Agnostic

Esri, Bentley Systems, Terra Suite, Leica, Autodesk, NVIDIA,



Business Values

Perseverance, Quality, Transparency, Integrity & Cooperation



70+ Countries



20K+ Projects



1000+ FTEs



F500 Clientele



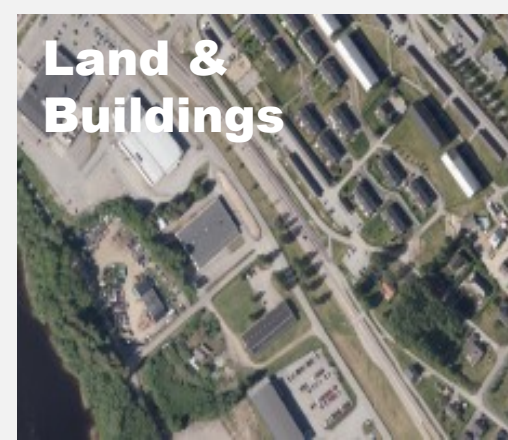
100% Human-in-the loop
Cross-Trained experts integrated with AI/ML

Certifications

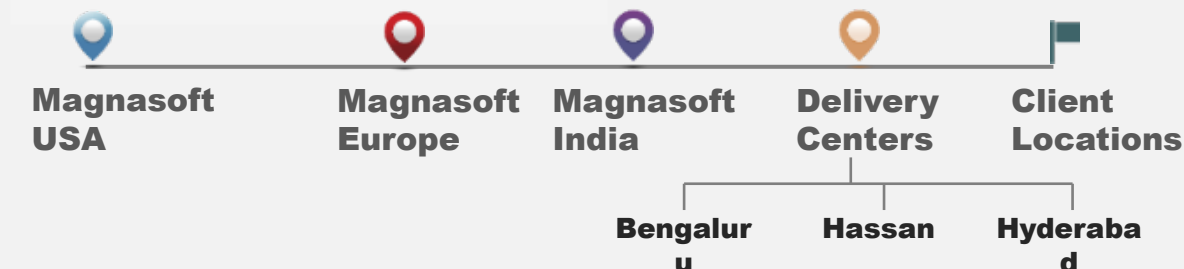


Service Areas

- Geospatial Mapping
- Geospatial Analysis
- Engineering & Design



Our Presence



Services overview



Geospatial Mapping

Land Use and Urban Mapping

Topography and Planimetry
City Modeling
Cadastral

Network Mapping

Electric, Gas, and Water
Telecom Networks
Transportation

Image Processing

(true orthos, RGBI/MSS,
multi-band, mosaics)

Data Migration and Conflation

(utility and engineering data)



Geospatial Analysis

Change Detection Analysis

Digital/Smart Cities Data Modeling

Routing Optimization with HD Maps

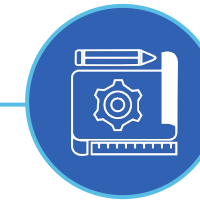
HD Maps Analysis

Interior/Exterior Modeling and
Rendering

Image Pattern Recognition & Analysis

Spatial Analysis & Modeling

Multi-Sensor Analysis



Engineering & Design

Architectural BIM

Structural BIM

MEP & Piping BIM

Plant & Industrial Services

Prefabrication/Modular Construction

BIM Coordination & Management

Visualization & Immersive Delivery

Civil & Site Services - Transportation,
Telecom & Utilities

MTwin: When Technology is not the Constraint



NATIONAL MAPPING AUTHORITY · DIGITAL TWIN PLATFORM

[Map View](#)

[01 Change Detection](#)

[02 Scenario](#)

[03 Plan & Permit](#)

[04 Sustainability & Impact](#)

[05 Operations](#)

[06 Governance](#)

nma.operator

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LOD 300 – Live 3D WebScene

[Back to Map](#)

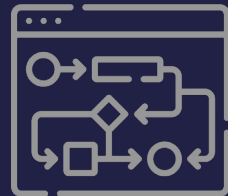


Eamonn Prowse - Senior Director UK | Geospatial World Forum 2026
Technical Track - Spatial Computing & Digital Twin

What this talk covers



A digital twin concept



The workflow it was designed to bring together



What we learned in building MTwin



Why we seek collaboration for our next steps

This talk is not.....

- » A product pitch
- » A deep technical walkthrough
- » Tied to a named client or deployment

Technology was not the Constraint

The Problem we thought we were solving

The end client - NMA bringing together a group of government agencies to provide a solution which addressed:



Fragmented planning and decision workflows

- Identification construction without consent



Assessing impacts

- Governance, Permits, Sustainability, Legal

Agencies include:

- National Planning Authority
- Building Control Agency
- Water Management Authority
- National Heritage Agency
- Roads & Infrastructure Authority
- Port Authority

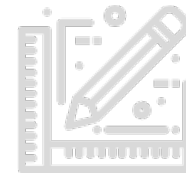
Key Challenges

- » Budget pressure and justification challenges
- » Legacy systems and mixed capability across teams
- » Complex interoperability across agencies
- » Legal responsibility for data used in decisions
- » Independent and asynchronous data updates



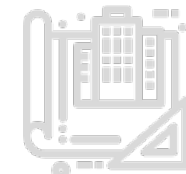
MTwin Concept – The Design Workflow

What Magnasoft did:



- Concept-stage digital twin platform
- Designed to unify an existing multi-agency workflow
- Built on proven and available technologies
- Focussed on decision support rather than visualisation alone

Platform Components:

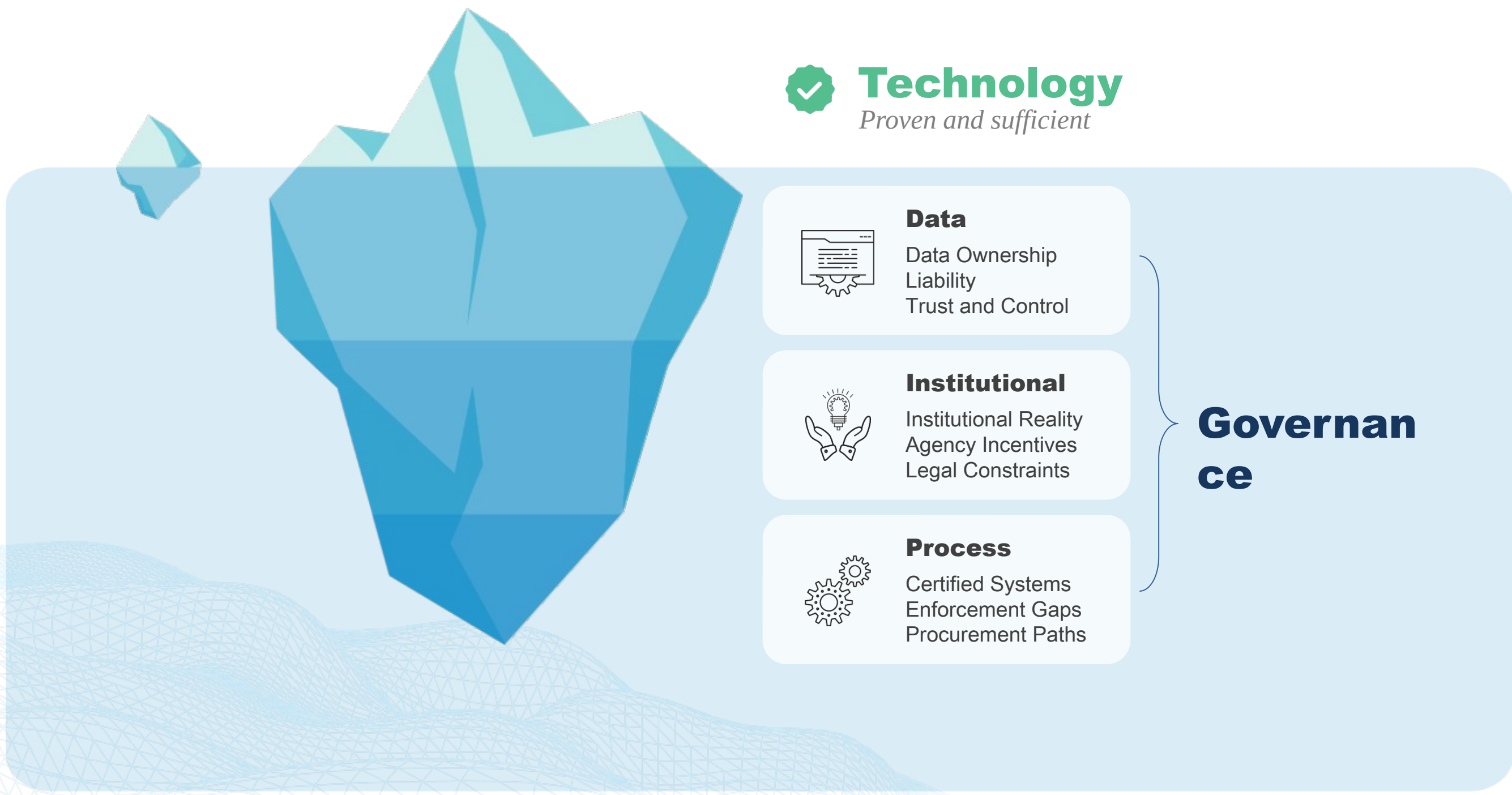


- Detection of Change
- Scenario modelling tool
- Planning and permit regularity compliance
- Sustainability and impact assessment
- Multi-agency cockpit - Governance auditing
- Digital Twin performance scorecard



MTwin
NATIONAL MAPPING AUTHORITY · DIGITAL TWIN
PLATFORM


The Turning Point – The Implantation Challenge




Next Step Collaborators

....


The Lesson Learned



Integration ≠ adoption
Building it isn't enough



Visualisation ≠ decisions
Seeing isn't acting



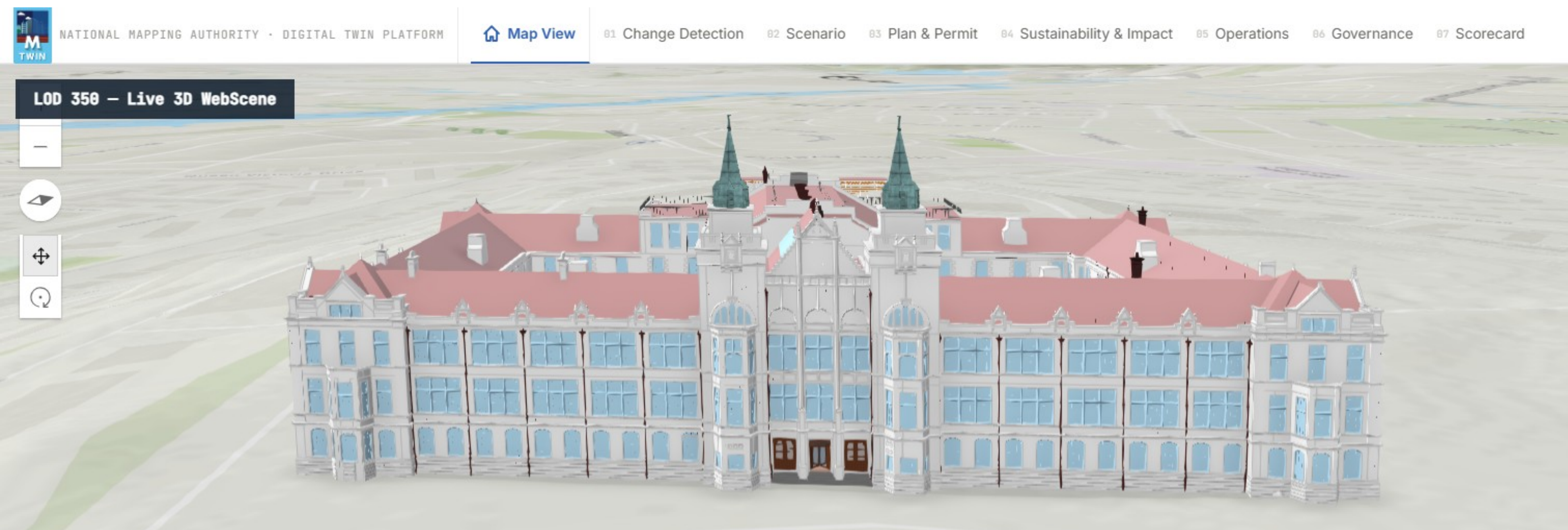
Governance = usability
The real constraint



Closing Comments

The Digital Twin is powerful - the technology is ready
Real value is only created when systems, organisations and incentives work together

However,...



ABOUT

US

Industry Leadership:

Established in 2002, Magnasoft stands as a global frontrunner in the domains of Geospatial Mapping, Engineering & Design, and Geospatial Analytics, catering to pivotal sectors including Telecom, Utilities, Land Administration, and Autonomous & Navigation

Commitment to Excellence and Security:

Our portfolio of certifications, which includes ISO 27001, ISO 9001, Cyber Essential PLUS, ISO 14001 & 45001, and ISO 22301, underlines our dedication to maintaining the highest standards of excellence, security, and operational best practices

Global Presence and Delivery:

With offices in Bangalore, USA, and Europe, and delivery centers in Bangalore, Hassan, and Hyderabad, Magnasoft has a strong global presence. We offer adaptable delivery models with flexible people, processes, and tools, ensuring efficient service delivery worldwide

Empowering Clients with a Customer-Centric Approach:

Our domain expertise and platform-agnostic approach enable us to deliver actionable insights and a single, digitized source of truth for real-world assets, fostering informed decision-making, optimized operations, and overall success for our clients

Pay for Outputs, Not Inputs:

We offer a unique business model where clients pay for outputs instead of inputs, allowing them to variablize their costs. This approach ensures our clients get the best value for their investment



Magnasoft • Geospatial + BIM Services • Mapping. Modeling. Managing.

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Transformational Geospatial Services